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1932—TWENTY-THIRD YEAR

REED BROTHERS

NORTH AMERICAN GROWN DISEASE FREE CABBAGE SEED

Official inspection for nearly 20 years shows our seed growing section to be practically immune to Black Leg



Our neighbor in his 20 acre field of Reed Bros. Danish. Two other men nearly joining him had about an equal acreage. They are making real money raising cabbage and know the value of our strain with its deep head and sure heading qualities.

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E. N. REED, MGR.—PHONE CORTLAND, 1896-W

PRODUCTION OF DISEASE FREE CABBAGE SEED

READ HOW ALL OF OUR STRAINS OF CABBAGE SEED ARE GROWN

Very few realize that it takes until the fifth year to get a crop of Disease Free Cabbage Seed ready to sell.

According to a government bulletin there is only one suitable section here in America where cabbage seed can be produced in quantity, free from the dreaded disease Black Leg. In this north, west section, which is as far north as Newfoundland, certain peculiar climatic conditions exist which prevent this disease from developing.

Some claim if one goes far enough north in Europe a similar condition can be found. Experience has taught that if there is such a section, it is small, and to meet the demand for their seed they can send farther south where much disease is present, get seed and reship it to us.

Fourteen years ago a government expert advised us to move our final seed production to this north country. This we did and so far we have never known of a single case of Black Leg or Black Rot coming from our seed.



Reed Bros. Cabbage Seed Growing in the North Country.

Note the Health and Vigor.

All our breeding work for seed stock is done at Cortland, N. Y., as usual. The first year we grow the heads and the second year the seed stock is grown from those selected and saved for that purpose. The third year this seed stock is sent to our grower up north and he grows a crop of cabbage. A fall sorting discards all undesirable heads and the rest are carried over winter for the final crop of seed the fourth year. At harvest threshing is done with special machinery which will not crack the seed. It is now ready to return to us. Upon receipt of this seed we immediately treat it with the hot water method, which makes doubly sure there can be no possibility of disease. Treating immediately avoids the danger of reducing germination as seed with a little age can be damaged quite seriously. The fifth year this seed is ready to sell.

Can you imagine any method of seed production more costly or requiring more time?

The final result of our seed growing method is positively disease free seed, grown in a north country, from our own high yielding seed stock with the highest percentage of germination possible.

The steady increase of its use is proof that it is fully worth the five years we have to devote to its production. True you can buy cheaper seed but if there was any shorter way to produce just as good disease free seed, the government and our State College would be recommending it.

REED BROTHERS

Short Stem Danish Cabbage

HOT WATER TREATED—NORTH AMERICAN GROWN—IN A BLACK LEG FREE SECTION



A LARGE
GROWING
STRAIN,
SET THICK
AND WELL
FERTILIZED,
PRODUCES
IMMENSE
YIELDS OF
MEDIUM
SIZED
HEADS

No question about this piece not cutting at least 20 tons per acre. In fact our yield was over 21 tons and harvesting was completed in early October. Seed heads taken from such a field furnish excellent seed stock

TYPE—Heads of true Danish type, extremely hard, good depth, with slightly tapering base. This makes cutting very easy, as heads can be cut all trimmed with one stroke of the knife. This strain produces VERY SCLID heads of uniform type. We know of no other strain of Danish as well typed. The extreme overlapping of the wrapper leaves to the heads make it a very desirable STORAGE CABBAGE. If stored late enough to make trimming necessary, the removal of one or two leaves gives a neatly trimmed head with a small per cent of waste. It is an exceptionally fine keeper. It cannot be otherwise, for by our method of growing seed from SELECTED MATURE HEADS, only those that will keep until sometime in May can be set for seed.

Heads Crack-Proof—Hard as a Rock—The unusual overlapping and crowding in of the leaves forming the head cause these two very desirable features. Even in the poorest years when other strains are soft, ours will be hard and solid. We never knew of its failing to form hard heads.

Habit of Growth—The plant is a rapid grower, having a short stem and large leaves. Thus the ground is quickly shaded in a dry season, which is very essential in preserving moisture. A little tint of color on the head greatly adds to its market appearance.

Yield—During the past 21 years we have not failed to have cabbage cut over 20 tons per acre. Some years as high as 30 tons.

We are fully convinced it is the most consistent yielding true type Danish in the world today. Where is there another with a 21 year record behind it?

It has vigor, keeping qualities, yield, solidity and it is as nearly crack proof as any Danish known. Yet the price of this treated, high yielding seed is only about \$2.00 per acre.

(See strain tests and testimonials back cover and page 10)

PRICE

Pkt. 25c, oz. 75c, $\frac{1}{4}$ lb. \$2.25, $\frac{1}{2}$ lb. \$4.00, 1 lb. \$8.00. All seed postpaid, either cash with order or C. O. D. Orders booked for delivery any date you wish.

Albion, N. Y., Jan. 21, 1931.

Reed Brothers, Cortland, N. Y.:

Gentlemen:

We had a fine crop of cabbage last fall, notwithstanding the dry season. The best by far that I saw anywhere and it was Reed Bros. seed that made it possible.

Very truly yours,

C. G. P.

GLORY OF ENKHUIZEN

NORTH AMERICAN GROWN—HOT WATER TREATED—OUR OWN STRAIN

FULLY one half of all cabbage used for kraut are Glory. It has been gaining in popularity for many years and now stands at the top of the list.

It is too well known to hardly need description, however, there are strains that are better than others. We believe the one we are offering has no equal. The heads are deep and practically round. With liberal fertilization and good culture one can readily get 30 tons per acre from this strain. It is one of the very best for early Fall shipping.

The Glory seed we offer here is grown in the extreme north. We believe this seed to be exceptionally hardy and free from disease.

Our man in the north country who has charge of growing our seed said this strain was the best he had ever seen. He has had over 25 years of experience in cabbage seed growing.

The supply of this strain is not too large and we say place your orders as early as possible. At this writing, we already have orders from those knowing about the strain for over a third of our total supply.

This seed is grown under the same care as is our Danish. See page 2, "Production of Disease Free Cabbage Seed."

We have seen a 12-acre field of this strain cut over 30 tons per acre, better than 360 tons. If germination, yielding ability and seed free from disease is what you are after, we most highly recommend this strain to you. The seed stock which produced the seed we offer here was on test by the Department of Vegetable Gardening, College of Agriculture, Ithaca, N. Y. in 1930.

Write them for their opinion about it.

We have been seven years getting this one lot of seed and are now pricing it at a real loss to us. However, we want as many as possible to try it as we intend to increase seed production of this strain in the future.

PRICE

Pkt. 15c, oz. 40c, $\frac{1}{4}$ lb. \$1.25, $\frac{1}{2}$ lb. \$2.25, 1 lb. \$4.00. All seed postpaid. Either cash with order or C. O. D.

EARLY GOLDEN ACRE

NORTH AMERICAN GROWN—HOT WATER TREATED SEED

THIS valuable variety is gaining in popularity. It originally was a selection from the good old strain Copenhagen Market, and was developed to meet a demand for a cabbage coming between that variety and Early Jersey Wakefield.

The first heads should be ready about ten days before Copenhagen Market. Shape of head and habit of growth are similar to it.

One will be repaid in earliness by using a liberal amount of complete fertilizer high in nitrogen. If weather conditions do not favor a rapid growth it may be hastened by scattering a little nitrate of soda between the rows after the plants are well started.

This strain is very true to type and being North American grown in the same section as our Danish, we believe there is none better. We had cabbage early enough to get the \$25.00 market in 1930 from this strain.

PRICE

Pkt. 10c, oz. 40c, \(\frac{1}{4}\) lb. \$1.00, \(\frac{1}{2}\) lb. \$2.00, 1 lb. \$4.00. Postpaid. Cash with order or C. O. D.

Gaddistown, Fla., March 9, 1931.

Dear Sirs:

Kindly send me your cabbage seed catalogue. The manager of the F. F. & P. Co. of At lanta, Ga., says they have found your seed to be the best.

Yours very truly,

A. D. T.

Callicoon, N. Y., March 18, 1931

Reed Brothers:
Please send the inclosed order of your Danish and Glory of Enk. I have grown your seed for 5 years and found it very satisfactory.

Yours, L. W.

COPENHAGEN MARKET

OUR OWN STRAIN—NORTH AMERICAN GROWN—HOT WATER TREATED

AN Old Standard Variety. This very popular fall cabbage is used extensively for fall shipping and kraut. It is also well adapted for the market gardener and roadside stand. It matures a little ahead of Glory. Heads may be cut any time they attain suitable size. They are nearly round and quite solid. The quality is excellent for any use. Plants are a rapid grower, especially if well supplied with nitrogen. With thick setting, good fertilization and letting the crop come to maturity 25 to 30 tons per acre are not uncommon.

This is Our Own Strain—Like our Danish we are growing the seed in the North Country. We believe this seed is the nicest lot we have ever seen.

Were it not for the fact that early strains seed heavier than Red or Danish we would have to charge just as much for this seed as we do for them.

If we ever had a lot of cabbage seed that we felt like recommending it is this Copenhagen. It has taken just as much time to get this seed ready to sell as it does our Danish, i. e., 5 years. See Page 2. Unless you have disease where you plant this seed you can rest assured you will get a healthy crop. We have held this seed one year for trial so it is a tested lot. State germination test over 95%.

Pkt. 10c, oz. 40c, \(\frac{1}{4}\) lb. \$1.00, \(\frac{1}{2}\) lb. \$2.00, 1 lb. \$4.00. All seed postpaid. Either cash with order or C. O. D.

REED BROTHERS RED DANISH

OUR OWN STRAIN—NORTH AMERICAN GROWN—HOT WATER TREATED

HURRAH FOLKS! We finally have a crop of seed from that wonderful strain of RED we have been working with so long. Fifteen years to be exact.

The cut shows the actual type of head. One very desirable feature about this RED is that it seems practically immune to leaf blight or tip burn.

We are not stretching things one particle when we say every plant given a normal chance will produce a market head. There are very few strains of Red which will produce over two heads from three plants. 15 to 20 tons are not excessive yields for this strain.

The color is uniformly dark and extends clear through. Even the roots on many plants

It is very free from bursting and will stand liberal fertilization. If your fertilization is only moderate space the plants a little farther apart. 3 ft. x 24 in. is about standard.

Pkt. 25c, oz. 75c, \(\frac{1}{2}\) lb. \$2.75, \(\frac{1}{2}\) lb. \$5.00, 1 lb. \$10.00. Postpaid. Cash with order or C.O.D.



Reed Bros. Red Danish, a World Beater. Actual Photo

Reed Bros.:

The red cabbage grown from your seed did fine and turned out a handsome lot of money.

> R. R. F., Palmyra, N. Y.

Clark's Summit, Pa., March 11, 1931.

Dear Sirs:

I see by your 1931 catalogue you are not listing your own strain of Red Cabbage seed. I am very sorry, as what I have tried before has been very fine. Should you have an ounce you could spare me I would be very glad to send you \$2.00 for it. I pack my cabbage in bushel baskets for the fancy trade so am anxious for the best.

Very truly yours,

H. W. H.

CABBAGE CULTURE

We are so frequently asked about our methods of cabbage culture we have decided to print the following general suggestions:

AMOUNT OF SEED TO USE PER ACRE

This question is asked more than any other about the crop. We have given it careful study and for many years have advised $\frac{1}{2}$ lb. for each acre to be set.

This may be a little excess, but some years, insects and weather conditions reduce the stand, and it is not safe to use less. The most important thing is to have plants enough so as to have "First Pick" as these plants always produce the largest yields.

So many replies, "Thank you for your advice" have come to us that we are very sure our rule is correct. Should you have a few extra, put up a sign, "Cabbage plants for Sale" and one year with another you will sell enough to more than pay for your seed.

SOILS ADAPTED TO CABBAGE

The cabbage thrives upon almost any soil that is reasonably dry. Those of the gravelly nature are apt to lack moisture in a dry season. Low lands which flood are pretty sure to contain the slime mold disease, "club root," and should not be used for cabbage or cabbage plants. A great many growers prefer sod ground, but the crop may be sown upon land which was used for other crops than cabbage or one belonging to that family the year previous. Usually such land will need a little more liberal supply of fertilizer.

Allowing stock to roam over the farm is a poor policy if cabbage growing is expected to be followed. Animals easily scatter diseased manure and track diseased dirt to new fields. No soil should be used for plant growing or the crop oftener than once in 5 or 6 years.

The Seed Bed

LOCATING, FERTILIZING AND SOWING

The greatest tonnage is secured by sowing the seed and setting the plants EARLY. For Central New York this would make the seed sowing the fore part of May and setting about the middle of June. Cabbage for storage can be set June 20th to July 1st.

Locating the seed bed where it is exposed to the WEST or NORTH wind is advised in controlling the cabbage maggot and flea beetle, as early insects hover in warm spots and shun cold locations. Avoid ground containing mustard, old gardens or rich spots around the buildings

DO NOT put the crop or seed bed upon the same ground oftener than once in six years else club root is liable to develop. Club root is not carried on the seed. (See Diseases.) Do not use manure from stock eating cabbage or cabbage leaves. Plowing or dragging a seed bed with tools which have just been used on an old cabbage field is apt to spread disesse. (See Diseases.)

For a seed bed sown broadcast use 2,000 to 3,000 sq. ft. of ground per lb. of seed. Apply to this spot 100 lbs. of some complete fertilizer, such as 3·10·4. Broadcast the fertilizer and drag it in. Avoid the excessive use of fertilizer, especially nitrogen. Sow the seed shallow, doing the work only when the ground is dry. Seed sown in rows can be treated for the cabbage maggots. 25 to 30 seeds per foot is about right.

Don't sow your seed too thick. Plants growing too slow about June 1st, may be hastened by scattering on a little nitrate of soda. Five lb. for every 2,000 to 3,000 sq. ft. is about right. Apply just as it starts to rain if possible.

KILLING SEED BED DISEASES AND THE CABBAGE MAGGOT WITH CORROSIVE SUBLIMATE

The damage to seedlings by maggots and using soil for a seed bed which has a little disease in it are causing great losses to cabbage growers. The toll seems to be on the increase. It is almost impossible for a man to be certain the spot he is selecting for a seed bed does not contain Club Root or some other disease. Since the seed bed is the foundation for the entire crop it is very important it should be CLEAN.

Sow your seed in rows and when the plants are well up, at least a week old, apply to every 30 ft. of row, at the base of the plants, 1 gallon of corrosive sublimate solution made by mixing

1 oz. of Powdered Corrosive Sublimate to 15 gals. of water. Repeat the application in about 1 week and again in about 10 days, making 3 applications in all. Use a 2 or 3 gal. watering pot which has the sprinkler removed and the spout plugged to give a solid stream 9.16 of an inch (about the size of your finger.) It is convenient to make the rows 60 to 90 ft. long, then 2 or 3 gallons will just cover a row. Applying the solution while walking out and back on the same row seems to allow more of it to soak in at the base of the plants than applying it all walking one way.

This method seems to be a sure protection against maggots if pains are taken to soak the ground thoroughly around the plants. It will also kill all disease in the dirt around the plants, which gets soaked with the solution. However we do not recommend any ground for a seed bed which is not thought to be clean. If a seed bed is chosen where disease is present there is always danger of infection. The dirt between the rows containing disease is liable to be washed or cultivated upon the plants.

Dissolve corrosive powder in a small amount of hot water first, then add enough cold to make desired amount of solution. This treatment is not very effective unless started before the plants are several weeks old.

FERTILIZATION OF THE CROP

For average land use 12 to 15 tons manure per acre, 600 lbs. 16% super phosphate and 100 lbs. potash, or 700 lbs. of 10-8 fetrilizer. If no manure is at hand use liberal amount of complete fertilizer. Broadcast all fertilizer and drag it in.

Fertilization is one of the important things in cabbage culture, as the texture, shape and size of heads in a strain can be greatly changed by the lack or over-supply of fertilizer. Usually the hill lands or knolls in a field will need more fertilizer and one higher in nitrogen than the flat or valley lands. We doubt the advisability of using much nitrogen on the richer lowlands or where clover or alfalfa sod is used for cabbage. Land lacking in potash or farms where it has not been used generally, a little added to the cabbage fertilizer will help to round out the crop and seems to prevent tip burn.

FIELD PREPARATION VERY IMPORTANT

Fall or early spring plowing is always desirable, then AS SOON AS THE GROUHD IS FIT IN THE SPRING, DRAG IT OVER. Keep dragging once a week until setting time and you will conserve all the early spring moisture, also germinate and kill most of the weeds in your soil. DON'T plow, drag, or set cabbage when the ground is too wet.

Late setting, late fitting and poor fertilization always spell poor crops.

Growing 20 to 30 tons of cabbage per acre means a plant growth of 30 to 40 tons. Remember no plant can take from the soil for its growth what is not there to take.

SETTING

Size of Heads—This is becoming VERY IMPORTANT. In many sections dealers are paying \$2.00 per ton more for heads of proper size. The grower can control the size of heads almost entirely by TIME OF SETTING, PROPER SPACING, PROPER FERTILIZATION AND MOISTURE CONTROL.

Our strain of Danish is a free grower and will stand a little thicker setting, therefore a HEAVIER YIELDER. We prefer setting in rows both ways. If our ground is well fertilized and the plants are ready early, we space the rows 30 inches apart one way by 20 inches the other, This uses about 10,600 plants per acre. One setting early on rich, well fertilized bottom land might space 30 inches by 18, using about 11,500 plants per acre. For conditions not as favorable, rows may be 3 ft. by 20 inches, using about 8,700 plants per acre or 3 ft. by 24 inches using about 7,200. Gravel soil requires wider spacing of plants, more fertilizer and better moisture control.

Our setting dates are from June 10th to 20th. July set Danish seldom make very heavy yields. However, if one has taken pains to fit his ground and weather conditions furnish sufficient moisture, good crops may result. Early setting brings a crop to its fullest maturity, but where cabbage are intended for storage those not too ripe are just as desirable. Usually thick setting retards maturity somewhat.

The market demands a medium sized head, 3 to 6 pounds. Please the trade and it will patronize you.

CULTIVATION

Frequent shallow cultivation is most desirable. Choose the heat of the day when the leaves are large to prevent breaking them. Use a walking cultivator with hoe steels for rear teeth, which extend horizontally under the leaves. Hoe steels are listed in Planet, Jr. cultivator catalogue. Continue cultivation until weeds are controlled. Do not cultivate deep as it will injure the roots and dry out the soil.

"Dont's" About Cabbage Culture

- Don't put cabbage plants on the same soil oftener than once in 6 or 8 years.
- Don't use some old garden or rich spot around the buildings for a seed bed. 3. Don't select a protected spot for the seed bed as insects hover in such places.
- Don't locate the seed bed below last year's cabbage field or any other place when there is danger of getting contaminated soil from an old field washed or carried to the new field.

5. Don't select a piece of soil where mustard grows for a seed bed.

6. Don't use any ground for a seed bed, or the crop, which floods at any time.

Don't try to grow plants on damp, soggy ground.

8. Don't over fertilize your seed bed. 100 lbs. of 3-10-4 for each 2,000 to 3,000 sq. ft. is sufficient at first.

9.

Don't sow seed and fertilizer together. Sow fertilizer separate and drag it in. Don't use any manure on a seed bed from stock or poultry that are eating cabbage. 10. Don't plow or fit a seed bed with machinery that has just been used on an old cabbage 11. field.

12. Don't plow or drag when your soil is too wet.

13. Don't sow your seed too thick. 3,000 sq. ft. per lb. broadcast or 25 or 30 seeds per ft.

in rows.

14. Don't expect to make money in cabbage growing by using common cheap seed. Poor cabbage years are when cabbage is high. These are the times when common strains do not head well.

15. Don't expect full results on poorly fertilized soil, but don't over fertilize.

Don't plow your field late in the season. Do it early or in the fall, then drag at inter-16. vals until setting time.

17. Don't set late if you expect a large yield.

18. Don't space plants unevenly or too far apart for medium sized heads.

19. Don't set when your ground is wet.

20. Don't cultivate too deep or break the leaves on the plants.

Don't cultivate more than is necessary. Fit your ground before setting, then cultivate shallow only enough for weed control.



REED BROTHERS IMPROVED TOOL STEEL CABBAGE KNIFE

This knife is the speediest, most practical tool for cutting heads out of cabbage plants.

Made of the Best Tool Steel-No sore blistered hands, no cut fingers, no chopping and spoiling of the cabbage heads and no after trimming. EACH HEAD IS CUT READY FOR MARKET OR STORAGE AT ONE STROKE OF THE KNIFE.

Simply insert the knife between the head and the leaves at the proper point and give a little push and the head rolls out all trimmed. The handle extends crosswise of the hand and affords ample grip. Cutting in no wise wrenches the hand or makes any spot sore. This knife saves hours of valuable time in trimming.

Many a man has lost fingers or thumbs by using a butcher-knife or hatchet. Safe for any boy or child to use. Very easy to keep sharp.

All surplus leaves are left on the plant, which is very desirable where the plants are to be cut later for feed.

This knife will save its cost many times over in cutting a single acre, as the removal of only one or two leaves on a cabbage head by using some poorly devised tool

means the loss of a good many hundred pounds per acre. We are sure they will please the most This is the best tool we have ever found for cutting cabbage.

Price \$1.00 postpaid. If you are not perfectly satisfied send it back and get your dollar.

MASTER'S RAPID PLANT SETTER

THIS is the most practical tool for transplanting CABBAGE, TOMATOES, CAULIFLOWER, TOBACCO, SWEET POTATOES, PEPPERS, and all similar plants.

Each plant is SET, WATERED and COVERED at one operation. There is no stooping or bending over, just straight ahead, easy, pleasant work. All the hard, tedious labor of hand

setting is done away with. ONE man will set and water more plants than three can do by hand. The most important thing is that EVERY PLANT LIVES.

One man can set and water 6,000 to 10,000 plants in a ten-hour day.

You cannot afford to be without this most valuable tool. It is never too hot and dry to set plants with this wonderful tool. It makes it absolutely certain that you can get your crop set on time.

The little squirt of water which every plant receives down at its roots soaks and seals the roots to the already moist soil underneath the surface. The dry soil in falling around the plant as the setter is removed acts as a mulch which holds not only the water put in with the plant, but also prevents evaporation of the moisture in the soil. This is different from setting and packing down the ground around a plant so that the sun dries it out and leaves it in a HARD, DRY LUMP.

THIS PRINCIPLE IS THE ONLY CORRECT WAY TO SET A PLANT. Every nurseryman and gardener will tell you to use exactly this principle in setting out trees and plants.

SEAL THE ROOTS TO THE UNDER SOIL BY THE USE OF WATER, THEN MULCH THE SURFACE TO PREVENT EVAPORATION.

Works anywhere, even on hillsides, among stones or stumps and every plant lives.

The plants can be check-rowed, thus permitting cultivation each way. Check-rowed plants are always even, and superior quality is the result. NO HCROP WHERE CHECK-ROWING IS PRACTICED.

NO HARD WORK NECESSARY ON THE

NO HARD WORK NECESSARY ON THE MICED.

THE SETTER IS NOT A PLAYTHING. It is built of heavy block tin, reinforced with wire. The jaws are of the best steel and the fittings are of brass. The water chamber holds enough for 125 to 150 plants.

We have used these setters over ten years and can say they will pay for themselves on every acre set. No one setting even a quarter of an acre can afford to do without one. Plants start quicker than with any other method of setting.

 $PRICE, \, \$6.00$ each, postpaid. Immediate shipment made. We are wholesale and retail dealers.

Reed Bros., Cortland, N. Y.

North Springfield, Pa., May 4, 1931.

Dear Sirs:

Enclosed please find my check for \$5.00 for $\frac{1}{2}$ lb. of your Short Stem Danish Cabbage seed. We have used your seed for a number of years and find it to be just as you say.

Yours Truly,

J. F. H.

ITHACAN OATS

In answer to what oats shall a man buy for seed we can do no better than quote from Dr. Bussell of the N. Y. State College of Agriculture, who says, "If I were to sow oats upon soils of average or medium fertility I would use the ITHACAN."

This variety was developed by the Department of Plant Breeding, N. Y. State College of Agriculture, Ithaca, N. Y., after many years of painstaking work.

Year after year it is a very consistent yielder. This does not hold true with most strains, as they soon fall off in yield and weight.

DESCRIPTION OF THE ITHACAN OATS

This is a very heavy yielding, thin-shucked variety with plump white kernels. The plant stools freely; maturing in mid-season. It is a tree or branching oat with good stiff straw of medium height, standing up well. Year after year the average weight is better than 40 lbs. per measured bushel.

When shucked 100 lbs. will give better than 70 lbs. of clear meats. The average strains run from 60 to 65 lbs.

We are using the original strain furnished by our State College and are keeping it free from smut and wild mustard.

PRICE

Recleaned seed (no mustard on our farm) 1 to 5 bu., 90c per bu.; over 5 bu., 75c per bu. of 32 lbs., F. O. B. Cortland, N. Y. Jute bags free. Double sacking, 5c per bushel extra. These are very fine oats.

Ithacan Oats and Alpha Barley, Mixed

Where oats and barley are sown as a mixed grain we believe that Alpha barley and Ithacan oats make an ideal mixture as they ripen nearly together.

Our mixture consists of about 2-3 oats and 1-3 barley. The barley used was certified seed. Of all the barleys this strain is recommended highest by our State College. The following record will be of interest:

YIELD RECORDS

Alpha Barley averaged 42.9 bushels per acre for the last seven years prior to 1931 grown in several different New York counties. It outyielded all the other improved strains. Beardless and barbless varities did not yield within 3 to 11 bushels as much.

In New Jersey tests at New Brunswick, Alpha averaged 45 bushels per acre, outvielding all others.

PRICE

100-lb. bags (about 2 1-3 bu. by measure), \$2.50 F.O.B. Jute bags free. Double sacked, 10c extra. Our supply is quite limited. Recleaned seed (no mustard on our farm.) Extra nice this year.

WHAT USERS THINK OF OUR STRAIN OF SEED

Painesville, O., March 24, 1931.

Please send us the inclosed order. We have grown your strain of cabbage from plants secured at a neighbors. They certainly are fine.

Thanks,

N. O.

J. A. A.

Gentlemen: Ringtown, Pa., March 27, 1931.

I am very much pleased with your strain of cabbage. It seems as though every seed makes two plants as compared to others I have bought.

Respectfully yours,

H. E. D.

Milltown, N. J., March 21, 1931.

Reed Brothers:
I sold some of your cabbage seed last year and the growers who used it were well pleased. Kindly send me the enclosed order by parcels post.

Respectfully,

Punxsutawney, Pa., May 9, 1931.

Gentlemen:
Your cabbage seed last year grew me the best crop I ever had, in spite of the dry weather. Hard as bullets and kept fine.

Yours truly,

S. B. I.

REED BROS. NORTHERN GROWN HARDY RED CLOVER

GENUINE OLD FASHIONED TWO CUTTING RED CLOVER

In describing to you what makes a hardy strain of Red Clover we can do no better than quote from a bulletin by Dr. Wiggins, of the N. Y. State College of Agriculture, which says: "If red clover is grown in a region of severe winters with little snow and with much thawing and freezing in the spring, only hardy plants will survive, and if seed is grown from such plants year after year a strain resistant to such conditions will develop. Seed produced under less severe conditions should be used only when better adapted seed is not available. Too much emphasis cannot be placed on the importance of knowing the origin of seed used in the production of red clover."

Seed having been grown for many years in Canada or one of the Canadian border states should be adapted to our use. Dr. Wiggins rates Michigan seed 100 per cent winter hardy for New York State. Seed from the corn belt of Indiana, Illinois, Iowa or the state of Oregon is not too well adapted to stand our rugged climate.



(Cut A) In 1927 this field was seeded with oats and common red clover, called Northern grown. (It all winter killed because it was not hardy seed adapted to our climate.) 1928 we cut a poor light crop of timothy and weeds, 1929 a crop of potatoes was grown, 1930 a crop of silo corn after which the field was fall plowed and a scant ton of ground limestone applied per acre, 1931 the field was again seeded with 1½ bushel Ithacan oats and a total of 8 quarts per acre of Reed Bros. hardy red clover and timothy. The oats were cut early in August and this good hardy red clover, which seems bound to blossom, came up making a cutting of hay, at least 1 ton per acre (see cut on page 12). Come and see this clover growing for yourself.

UNITED STATES GOVERNMENT KNOWS THE IMPORTANCE OF SEED ORIGIN

So important is it to know the origin of your red clover seed, that the United States Government has established a United States verification system whereby the seed from various states is put up in United States Government sealed bags with a verification tag showing where it was grown. Of course the volume of this quality of seed is not very great and its use is being opposed very bitterly by those selling cheaper seed not as well adapted to the northern climate.

Unless one uses really hardy adapted seed, clover failures are very common and extremely costly. As yet few northern farmers of the present generation are familiar with a truly hardy strain. Once a man uses such seed he will drop the now quite general use of alsike on ordinary ground because it cuts only one cutting where as hardy red clover will give two good cuttings, and often much of it will live until the third year.

Let's go back to grandfather's time; clover failures were almost unknown. Every one used his own home grown seed or some from a neighbor which was hardy to his section because nature had killed off the weaker plants leaving only hardy ones. As our cities grew, demanding in-

creasing quantities of agricultural products the corn belt with its rich lands commenced to grow clover seed as a cash crop to be shipped east to our farmers who could purchase it cheaper than they could raise home grown. Right here started the decline of good red clover growing. You like ourselves have stumbled along all these years until lately, not knowing the cause of so many almost failures.

IS ADAPTED HARDY SEED REALLY EXPENSIVE!

We have to pay what seems to be a little premium for seed which is hardy enough for us. But when we stop to think that the amount necessary to get a good stand on an acre, costs even less than the large amount of ordinary seed used, let alone the failures with the ordinary unadapted seed, the balance swings much in favor of the hardy seed.



Cut B) Same field as photo (a) page 11 with clover cut and bunched in the fall of 1931.

THE PRESENT PRACTICE OF SEEDING IS VERY COSTLY

It is quite a general custom to use 12 to 16 quarts of grass seed per acre. LISTEN: If 4 quarts of red clover seed are spread evenly over one acre, each sq. ft. would have 40 seed on it. When proper field preparations have been used there is no reason why 4 quarts of seed, if hardy, should not give a good stand. (See clover growing suggestions.)

A number of years ago we had over 20 acres of red clover seeding which looked excellent in the fall, but by spring it had all winter killed. Much of the red clover in this section was in the same condition except one neighbor's field on a poor hill farm. This man had moved here from Michigan where they are still growing their own red clover seed. He had sent back home for his supply each year since he had been here, saying he knew the seed being sold to us from sections farther south or Europe would partly winter kill in the average year and die entirely during a severe winter.

In 1921 the New York State College of Agriculture at Ithaca, N. Y. commenced to test red clover seed from various sections for winter hardiness. If you will take the pains to write them, we are very sure they would reply that our neighbor, above quoted, is right.

The crop of seed in the north is again only 30 to 40 per cent and we cannot guarantee prices beyond our present supply, which is quite limited. However we are sure we can make the per acre cost of your seeding cheaper than where less hardy seed of the same purity is used in larger amounts per acre.

PRICES

1 bu. \$19.50, $\frac{1}{2}$ bu. \$10.00, $\frac{1}{4}$ bu. \$5.00. Less than 1 pk., 35c per lb. Full bag, about 170 pounds, 32c per lb. Approximately \$19.25 per bu. F. O. B. Cortland, N. Y. Can be sent sight draft by freight or express, C. O. D. Add postage for small amounts by mail.

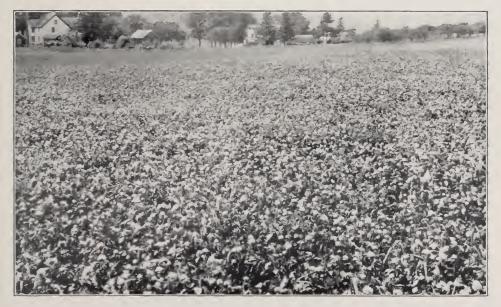
Note:—Full bags of about 170 lbs. carry Certified Origin tag and United States Government seal. We will break a bag if you do not want a full one. Of course it cannot carry the original United States Government seal, unbroken.

We let a friend at McLean, N. Y., have a little of this hardy seed. Here is what he writes: "The hay crop I harvested from your red clover was extremely good. Thank you."

C. L. H.

CLOVER GROWING SUGGESTIONS

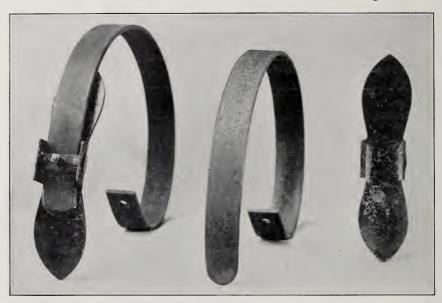
- If obtainable use only hardy seed of known origin adapted to your section. Inoculate your seed.
- 2. Don't smother your young seeding by sowing $2\frac{1}{2}$ to 3 bu. of grain. $1\frac{1}{2}$ to 2 bu. will give just as large yields and much plumper grain.
- 3. Test your soil and use lime if necessary.
- 4. Don't pasture your new seeding. A hardy strain often makes growth enough to tempt a man.
- 5. Don't expect any clover to succeed on wet land or catch well where the supply of plant food is too low. It is well to use 300 lbs. of super phosphate when seeding.
- 6. Don't expect good clover by sowing a lot of timothy. Timothy seed is about ½ as large as clover and if one uses 4 quarts per acre each square foot would have about 80 seeds on it. It being a ranker grower will act like weeds in a cultivated crop if sown too thick.
- 7. It isn't the quantity of clover seed you sow but it is its HARDINESS that counts.
- 8. Usually the best stands of clover are obtained on land which has been well fertilized and which has successively grown two cultivated crops. If potatoes have been one of the crops so much the better. Try this with either clover or alfalfa. A man here on a poor hill farm won second prize for New York State by using this method with alfalfa. He is not in the limestone alfalfa belt and only 1 ton of ground limestone was used per acre. We have tried it repeatedly with clover so we are sure it is a practice well worth following if possible.
- 9. A light sprinkling of manure on new seeding in the fall or early winter will greatly benefit it, if the fertility is low, especially on land that was just cropped with cabbage.



Our first trial of hardy red clover several years ago. On the strip just back of the buildings seed from another source was used as a test. As you can see it all came up to timothy. Photo taken June 12.

IS YOUR HARROW IN GOOD SHAPE?

If not put on a set of our IMPROVED STEEL POINTS and make it as good as new. LATELY MADE HEAVIER FOR TRACTOR USE. Will wear much longer than old style.



Drag! Drag! Is the Way to Get Crops

Your harrow is the MOST IMPORTANT tool you own, and still it is the one most neglected by farmers in general. A man will use one with old, worn, dull teeth just as long as it will stir fresh dirt enough on the surface to cover up the rest so be cannot see what it has done

fresh dirt enough on the surface to cover up the rest so he cannot see what it has done.

Put on a set of our new extra heavy REVERSIBLE TOOL STEEL HARROW POINTS and make the old harrow just as good as new. After these points become worn they can be reversed and again your harrow is as good as new. A harrow equipped with these points will never wear out.

ABSOLUTELY GUARANTEED NOT TO BREAK OR COME OFF. Can be put on in 10 minutes. Fit any harrow tooth. Horse drawn or tractor.

We have used them for years on both team and tractor harrows. TAKE OUR WORD "THEY ARE NO TOY." These are a third thicker than any we have previously sold.

ONE NEW REVERSIBLE POINT WILL WEAR AS LONG AS TWO NEW TEETH.

PRICE ONLY 35c EACH

HAVE YOU READ ABOUT OUR CHEAP RED CLOVER SEED?

- 1. In the cold climate where it is grown, nature has long ago killed off the weak plants. Nearly every seed will produce a plant which lives and winters. This makes it cheap to use because much less is needed to get a stand.
- 2. With ordinary seed which is not acclimated like ours, farmers are using nearly twice as much, and often fail then to get a stand. Why waste money this way. Grass seed is expensive.
- 3. Last summer many men reported good catches with our seed while common clover sown right side of it, only dried up and died. IT IS EXTREMELY HARDY.
- 4. We have never seen red clover that was so sure to cut a second crop as this strain. IT SEEMS BOUND TO COME UP AND BLOSSOM.
- 5. Often with our strain there is more clover in the second years hay crop than most men get the first, when common poorly adapted seed is used.
- 6. Full bags of about 170 lbs. are Government sealed and carry origin tag. Why not club with your neighbors and get a sealed bag if you do not need a full one.

See Pages 11 & 12

Gentlemen:

lowing:

Please forward the fol-

(State on line below if wanted by Mail, Express, or Freight).

193

(Mail,

State

ORDER SHEET

REED BROTHERS

CORTLAND, N. Y.

Cabbage Seed Specialists

(If different) (from P. O.)

Date.

Street or R. D.

Post Office

Express or Freight Office

lease Write Plainly.

Name_

| QUANTITY | | | | NAMES OF SEEDS OR OTHER ARTICLES WANTED | | Price | |
|----------|---------|--------|-----------|--|----|-------|--|
| Pkts. | Ozs. | Lbs. | Bus. | | \$ | Ct | |
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| strain | we list | if you | will give | ered 1/4 lb. or more of cabbage seed you may add FREE, 1 us the names and addresses of five men who grow cabbagent before. | | | |
| Name | | | | Address | | | |
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TIP BURN OF CABBAGE

(OFTEN CALLED LEAF BLIGHT)

Many have been troubled with this disease certain hot seasons like 1931. It seems to be always present, ready to develop when conditions are favorable.

After a careful study by the State Department of Plant Pathology and also personal observations some control measures have been noted.

If possible select cabbage ground which is not hot and dry or too low in organic matter. old run out timothy sod facing the south or east seems to be an ideal place for trouble. In fields last year lying on a side hill facing the sun, rows at the foot were nearly all brown while those a little farther up were less affected and those near the top were quite green. The upper lands seem to be less subject to the trouble if properly fertilized. Extremely early set cabbage which come nearly to maturity before the weather has cooled in the fall, seem to show more of the disease than those set later in the season. In the hot years, which are the ones most subject to the disease, we have noted many times, fields grown partly on sod ground and partly on stubble, show very marked difference. On the sod ground cabbage will be quite brown while on the stubble they are nice and green. We prefer stubble ground for storage cabbage.

It must be remembered that stubble ground requires liberal complete fertilization to grow heavy crops. And don't use ground that grew cabbage the year before or any other cruviferous crop.

The early varieties and the red cabbage are quite immune to the trouble most years.

The Plant Pathology Department brought out the fact that improper fertilization was a very direct cause to this disease. Excessive amounts of nitrogen and especially phosphorous or the lack of potash furnished conditions favorable for development of the trouble. A well balanced fertilizer carrying a fair amount of potash is advisable.

In our breeding work with our Danish for quite a number of years back we have been selecting only heads for seed stock which seemed to be quite immune to the trouble. We feel we are making considerable progress towards a strain resistant to the disease.

We doubt this disease being very contagious from year to year but feel if one uses a hardy vigorous strain like ours and follows the above suggestions of field selection and fertilization of the crop, much trouble can be avoided.

A SIX YEAR TEST BY ORLEANS COUNTY FARM BUREAU PUTS REED BROS. DANISH CABBAGE SEED AT THE TOP OF THE LIST. (SEE TABLE BELOW). Our strain also gave the highest yield out of seven tested by the Genesee County Farm Bureau in 1930. These tests should settle the real value of our Danish seed in the minds of our friends and patrons.

| 1925 to 1930 inclusive | No. of years | No. of tests | Average yield of all |
|---|--------------|--------------|------------------------|
| The Best Strains known were used in this test | on test | made | tests in Tons per acre |
| No. 1 Reed Bros. | 6 | 15 | 13.3 |
| No. 2 | 5 | 12 | 12.4 |
| No. 3 | 5 | 11 | 10.3 |
| No. 4 | 3 | 6 | 8.7 |

Not only did we have the highest average yield, but we hold the highest yield in any single year of this test, 26 1/3 tons per acre.

(Note): Lack of rainfall in this section gives a lower average yield. They have 4 in. less during the growing season than we do at Cortland, N. Y.

WHAT USERS THINK OF OUR STRAIN OF SEED

Conneautville, Pa., May 6, 1931. Dear Sirs: All the cabbage I have ever raised for Commercial purposes has been from your seed Hardy plants good quality and yields, in spite of weather conditions is why I continue to buy. Yours truly,

W. B. R.

W. L. D.

Jefferson, N. C., April 2, 1931. Reed Brothers:

Inclosed please find my order for cabbage seed. I have used your strain two years and am well pleased with it. Yours and oblige,

Perry, N. Y., March 23, 1931.

Dear Sirs:

I have used your Danish cabbage seed two years now and would like another pound sent C. O. D. at once. Am well pleased with it.

Very truly yours,

W. J. P.